# CONTROL SYSTEM FOR PROGRESSING CAVITY PUMPS

## ABSTRACT OF THE DISCLOSURE

A control system for the operation of a progressing cavity pump which may be used for production of gas and/or oil from a well. The control system includes vector feedback model to derive values of torque and speed from signals indicative of instantaneous current and voltage drawn by the pump motor, a pump model which derives values of the fluid flow rate and the head pressure for the pump from torque and speed inputs, a pumping system model that derives from the estimated values of the pump operating parameters an estimated value of a pumping system parameter and controllers responsive to the estimated values of the pumping system parameters to control the pump to maintain fluid level at the pump input near an optimum level.